What Is Claimed Is:

A method of manufacturing a fuel injector comprising:

providing a clean room;

fabricating a fuel tube assembly in the clean room;

fabricating an armature assembly in the clean room;

fabricating a seat assembly in the clean room;

assembling a fuel group by performing the following processes in the order

recited:

10

inserting an adjusting tube into the fuel tube assembly; inserting a biasing element into the fuel tube assembly; inserting the armature assembly into the fuel tube assembly; and connecting the seat assembly to the fuel tube assembly; and inserting the fuel group into a power group outside the clean room.

- 2. The method according to claim 1, wherein fabricating the fuel tube assembly comprises fixedly connecting an inlet tube to a magnetic pole piece.
- 3. The method according to claim 1, wherein fabricating the fuel tube assembly comprises fixedly connecting a magnetic pole piece to a non-magnetic shell.
- 4. The method according to claim 1, wherein fabricating the fuel tube assembly comprises fixedly connecting a non-magnetic shell to a valve body.
- 5. The method according to claim 1, wherein fabricating the armature assembly comprises fixedly connecting a magnetic armature to a preferably non-magnetic sealing element.
- 6. The method according to claim 5, further comprising fixedly connecting an armature tube between the magnetic armature and the sealing element.

- 7. The method according to claim 1, wherein fabricating the seat assembly comprises fixedly connecting a sealing element guide to a valve seat.
- 8. The method according to claim 1, further comprising installing a filter into the fuel tube assembly.
- 9. The method according to claim 8, wherein the filter is fixedly connected to the adjusting tube.
- 10. A method of assembling a fuel group comprising:

providing a clean room;

fabricating a fuel tube assembly in the clean room;

fabricating an armature assembly in the clean room;

fabricating a seat assembly in the clean room;

assembling the fuel group by performing the following processes in the order

recited:

inserting an adjusting tube into the fuel tube assembly; inserting a biasing element into the fuel tube assembly; inserting the armature assembly into the fuel tube assembly; and connecting the seat assembly to the fuel tube assembly.

- 11. The method according to claim 10, wherein the fabricating of an armature assembly further comprises setting an injector lift height.
- 12. The method according to claim 10, wherein fabricating the fuel tube assembly comprises fixedly connecting an inlet tube to a magnetic pole piece.
- 13. The method according to claim 10, wherein fabricating the fuel tube assembly comprises fixedly connecting a magnetic pole piece to a non-magnetic shell.

- 14. The method according to claim 10, wherein fabricating the fuel tube assembly comprises fixedly connecting a non-magnetic shell to a valve body.
- 15. The method according to claim 10, wherein fabricating the armature assembly comprises fixedly connecting a magnetic armature to a preferably non-magnetic sealing element.
- 16. The method according to claim 15, further comprising fixedly connecting an armature tube between the magnetic armature and the sealing element.
- 17. The method according to claim 10, wherein fabricating the seat assembly comprises fixedly connecting a sealing element guide to a valve seat.
- 18. The method according to claim 10, further comprising installing a filter into the fuel tube assembly.
- 19. The method according to claim 19, wherein the filter is fixedly connected to the adjusting tube.
- 20. The method according to claim 16, wherein the armature tube is non-magnetic.